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10/676,908	09/30/2003	Alfred A. Kahner III	1133/201	8056

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EXAMINER	
JOYNER, KEVIN	
ART UNIT	**PAPER NUMBER**
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/676,908	KAHNER ET AL.	
	Examiner	Art Unit	
	Kevin C. Joyner	1744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 May 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *45-93* is/are pending in the application.

4a) Of the above claim(s) *85-93* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *45-84* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/30/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I (claims 45-84) in the reply filed on May 7, 2007 is acknowledged. The traversal is on the ground(s) that:

I The system would perform each and every step recited in the method of Group I.

II The scope of inquiry to seek "materially different" processes should reasonably be limited to those processes that may reasonably be substituted with the recited process of Group I.

III Painting is not inconsistent with treating a contaminated surface in the cavity.

This is not found persuasive because the system is **for** abating contamination present within a cavity and treating a contaminated surface in the cavity. These recitations in the claims are merely the Applicants' intended use for the system and does not add any structure to the system whatsoever. As long as a system comprises a first device capable of exhausting contaminated air and a second device capable of treating a contaminated surface, then the limitations of the system in claim 85 is met. Therefore, a system and method for painting a surface with the proposed system would meet the limitations of claim 85, without performing each and every step of the recited Group I, as it would not

abate contamination present within a cavity. Furthermore, one of ordinary skill in the art would recognize and deem it reasonable to utilize a system that includes a first exhausting device and a second treating device to paint a cavity. Finally, the examiner concedes that covering the contaminated surface would be treating the surface in some manner, however it would not be abating the contaminated surface in any form or fashion.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 85-93 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on May 7, 2007.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 75 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 75 recites the limitations "the killing, destroying or removing step" and "the applying material step" in line 2. There is insufficient antecedent basis for this limitation in the claim. For purposes of examination, the Office will treat the claim as though it reads, "a killing, destroying or removing step" and "an applying material step."

6. Claim 68 contains the trademark/trade name TIM-BOR®. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe a biocide and, accordingly, the identification/description is indefinite.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 45-53, 56-58, 61, 65-67 and 75-83 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Molleker (U.S. Publication No. 2004/0067178).

Molleker discloses a method for abating contamination present within a cavity in a structure comprising the steps of:

Exhausting contaminated air in the cavity in a controlled manner through one or more outlet openings in the structure that are in flow communication with the cavity (paragraph 16); and

Treating a contaminated surface in the cavity in a manner that is substantially non-destructive to the contaminated surface wherein the treating step comprises killing at least a substantial portion of contaminates present on the contaminated surface, and applying a material to the contaminated surface to limit the dispersal of contaminants within the cavity and/or recontamination of the contaminated surface (concerning claim 46; paragraphs 11-16) as disclosed in paragraphs 11-16 and Figures 1-3. Regarding claims 47 and 48, the method continues to disclose that the treating step comprises introducing a biocide into the cavity as a mist, a spray, or a vapor (paragraphs 24-26). Concerning claims 49-51 the reference also discloses that the cavity is substantially or completely enclosed by the structure that is one a of a permanent, semi-permanent and temporary structure that is a wall, ceiling, or floor (paragraph 24).

Regarding claim 52, Molleker continues to disclose that the exhausting step limits flow of contaminated air into the ambient environment (paragraphs 13 and 24). Concerning claim 53, the method also discloses that the exhausting step removes at least a portion of the contaminated air from the cavity through one or more outlet openings (paragraphs 15 and 16). Regarding claims 56 and 57, the method discloses establishing a pressure gradient by drawing air from

within the cavity through said one or more outlet openings and causing movement of air into the cavity through one or more inlet openings provided in the structure in flow communication with the cavity (paragraphs 14 and 16). Regarding claim 58, the method also discloses providing a pliable seal to seal the outlet opening to a device for drawing air from the cavity (paragraphs 27-30 and 38-39).

Concerning claim 61, the method continues to disclose that the treating step comprises introducing a biocide into the cavity following the establishment of a pressure gradient (paragraphs 16 and 25). More specifically, the air is drawn from the contaminated space and mixed with ozonated air and reintroduced to the contaminated space. During the initial stages of use, a first portion of air that is in the contaminated space is drawn into the system creating a pressure gradient before the ozonated air is introduced. That portion of air is then mixed with ozone and reintroduced to the contaminated space. Concerning claim 65, the reference discloses that the treating step is undertaken in conjunction with the exhausting step (paragraphs 14-16). Regarding claims 66 and 67, the biocide comprises an oxidizer that is ozone (paragraph 16). Regarding claims 75-77, the method also discloses that the treating step comprises both a killing or removing step and an applying the material step that is undertaken in conjunction with one another as well as with the exhausting step (paragraphs 14-16). More specifically, the ozone, which is a material, is applied to the interior of the wall and kills mold spores as disclosed in paragraph 16. Regarding claims 78-82, the reference discloses that the contamination is mold (paragraph 11).

Regarding claim 83, Molleker discloses a method for abating contamination of a contaminate surface of an open structure, comprising the steps of:

Creating a temporary enclosing structure substantially or completely enclosing a cavity, at least one portion of the structure is comprised of the contaminated surface of the open structure; and

Abating contamination present within the cavity in accordance with the method as in claim 45 in paragraphs 11-16 and Figures 1-3. More specifically, inlet and outlet openings are formed in the walls that are contaminated with mold, which provides an open structure. The openings are enclosed by connecting wall connectors and air delivery tubes to the inlet and outlet openings to remove the mold from inside the walls as disclosed in paragraph 28. The wall connectors are disconnected after the decontamination occurs which creates an open structure again. Thus, the structure is an open one that is temporarily enclosed by the connection of wall connectors and air delivery tubes.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 54-55 and 69-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molleker (U.S. Publication No. 2004/0067178) in view of Bentley (U.S. Publication No. 2004/0091390).

Molleker is relied upon as set forth above. Molleker does not appear to disclose that the method further comprises the step of removing contaminants from the contaminated air by filtration. Bentley discloses a method for abating contamination present in a structure comprising the steps of: exhausting contaminated air in the structure in a controlled manner and treating the contaminated surface in the structure in paragraphs 18-21. The reference continues to disclose that the method further comprises the step of removing contaminants from the contaminated air by filtration in order to remove air particulates in the exhausted contaminated air (paragraph 20). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Molleker to include a filter and a filtration step in order to effectively remove particulates from the exhausted contaminated air as exemplified by Bentley. Concerning claim 55, Molleker continues to disclose that the previously exhausted air is returned to the cavity in a closed loop process in paragraph 16.

Regarding claims 69-72, Molleker does not appear to disclose that the treating step comprises the step of introducing a lock-down material into the cavity that provides a barrier to the contaminants on a portion of the surface that is delivered as a spray. Bentley continues to disclose that the treating step comprises the step of introducing a lock-down material into the cavity that

provides a barrier to the contaminants on a portion of the surface that is delivered as a spray in order to prevent any remaining surface mold spores from becoming airborne and to create a fungicidal barrier (paragraph 45). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Molleker to include the step of introducing a lock-down material into the cavity that provides a barrier to the contaminants on a portion of the surface that is delivered as a spray in order to prevent any remaining surface mold spores from becoming airborne and to create a fungicidal barrier as exemplified by Bentley. It is noted that the treating step takes place in conjunction with the exhausting step that establishes a pressure gradient in the method of Molleker, and thus the established pressure gradient would facilitate the dispersal of the lock-down material in the cavity.

11. Claims 59 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molleker (U.S. Publication No. 2004/0067178).
Claims 59 and 60 further requires that the outlet openings are 0.5 inches to 1.5 inches in diameter and that the inlet openings are 0.25 to 1.0 inches in diameter. It would have been well within the purview of one of ordinary skill in the art to optimize the diameter of the inlet and outlet openings in order to maximize the pressure gradient that is created by the system. Only the expected results would be attained.

12. Claims 62-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molleker (U.S. Publication No. 2004/0067178) in view of Roy (U.S. Patent No. 5,968,401).

Molleker is relied upon as set forth above. Molleker does not appear to disclose that the treating step comprises applying microwaves that are capable of penetrating into the cavity in which the contaminants are present, and that are capable of killing or destroying at least a substantial portion of the contaminants by heating the contaminants. Roy discloses a method for abating contamination present within a cavity in a structure comprising the step of: treating a contaminated surface in the cavity in a manner that is substantially non-destructive to the contaminated surface. The reference continues to disclose that the treating step comprises applying microwaves that are capable of penetrating into the cavity in which the contaminants are present, and that are capable of killing or destroying at least a substantial portion of the contaminants by heating the contaminants in column 2, lines 1-30. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Molleker to utilize microwaves that are capable of penetrating into the cavity in which the contaminants are present, and that are capable of killing or destroying at least a substantial portion of the contaminants by heating the contaminants in order to effectively kill, destroy, or remove the contaminants from the cavity as exemplified Roy.

13. Claim 68 is rejected under 35 U.S.C. 103(a) as being unpatentable over Molleker (U.S. Publication No. 2004/0067178) in view of Croan et al. (U.S. Patent No. 5,356,624).

Molleker is relied upon as set forth above. Molleker does not appear to disclose that the biocide comprises TIM-BOR®. However, TIM-BOR® is a

conventionally known and commercially used product for the abatement of contamination present in a structure. Croan discloses an example of this wherein the reference teaches a method for the abatement of contamination present in a structure (column 3, lines 52-57; column 4, lines 10-25) wherein a biocide is present in the form of TIM-BOR®. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Molleker to utilize TIM-BOR® as the biocide, as such is conventionally known and commercially used against contaminants such as mold as exemplified by Croan.

14. Claims 73 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Molleker (U.S. Publication No. 2004/0067178) in view of Bentley (U.S. Publication No. 2004/0091390) as applied to claims 54-55 and 69-72 above, and further in view of Kourai et al (U.S. Patent No. 4,826,924).

Molleker in view of Bentley is relied upon as set forth above. Molleker in view of Bentley does not appear to disclose that the lock-down material includes the material of styrene. Kourai discloses an antibacterial polymer that is utilized against mold spores in floor material, ceiling material and building material (column 1, lines 10-20). The reference continues to disclose that the antibacterial includes the substituted ethylene monomer of styrene (column 1, lines 50-55) in order to provide an enhanced antibacterial effect and improve the durability of the product. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Molleker in view of Bentley to include in the lock-down material the material of

styrene in order to enhance the antibacterial effect against molds and provide longer durability for the material as exemplified by Kourai.

15. Claim 84 is rejected under 35 U.S.C. 103(a) as being unpatentable over Molleker (U.S. Publication No. 2004/0067178) in view of Nadkarni.

Molleker is relied upon as set forth above. Molleker continues to disclose providing wall connectors and delivery tubes in conjunction with an open structure to form an enclosing structure in paragraph 28. Molleker does not appear to disclose that a hood is used to form an enclosing structure. Nadkarni discloses a method for abating contamination of a contaminate surface of an open structure, comprising the steps of: creating a temporary enclosing structure substantially or completely enclosing a cavity, at least one portion of the structure is comprised of the contaminated surface of the open structure and abating contamination present within the cavity in accordance with the method as in claim 45 (paragraph 15). The method continues to disclose that a hood is utilized in conjunction with the open structure to form an enclosing structure in order to ensure that the contamination does not enter into the atmosphere and to provide an effective suctioning device as shown in Figure 1 (paragraphs 25-28). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method of Molleker to utilize a hood in the step of enclosing the structure in order to ensure that the contamination does not enter into the atmosphere and to provide an effective suctioning device as exemplified by Nadkarni.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin C. Joyner whose telephone number is (571) 272-2709. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KCJ

GLADYS P. CORCORAN
SUPERVISORY PATENT EXAMINER